

I. INTRODUCTION

A. PRELIMINARIES

The McKean/Cochran Farm was discovered in late November 1994. We had arrived in the small historic town of Odessa the week before to carry out an archaeological survey of the route of a new highway, known as SR 1, that will carry traffic from Wilmington and I-95 to the Delaware beaches. The site was discovered one morning while we were investigating a large property on the north bank of the Appoquinimink River. At Odessa, the Appoquinimink River is a tidal creek lined with marshes. The river is now a recreational site for fishermen and boaters, but to Indians it had been a rich source of vital food, and in colonial times it was a highway to the sea. Despite the cold wind blowing off the river, we started our work that morning with high hopes. Amateur collectors had already found Indian spearpoints and arrowpoints on this spot, and it also seemed a likely setting for a colonial farm—perhaps even a Dutch farm dating to the earliest European settlement of the Appoquinimink River Valley (Plate 2).

Soybeans had been cut from the property only a few weeks before our visit, leaving the ground covered with a thick brown mat of leaves and stems. We were laying out a grid of pink pin flags across the highway corridor, each flag marking a spot where our crew would dig a shovel test pit, working our way up the hill away from the river. We were using the metric system for our measurements, and the flags were spaced 20 meters, or



PLATE 2: McKean/Cochran Farm Site from the Air

about 65 feet, apart. About a hundred yards from the riverbank we saw the first artifact through the soybean leaves. When we had picked it up and examined it, we saw that it was a sherd of coarse red earthenware.

By itself, a single sherd of coarse red-bodied earthenware is almost meaningless. This material was used by European settlers when they first arrived in the New World, and it continues to be made up to the present. Red-bodied earthenware (redware) was so common during much of that long period that it can be found almost anywhere, sometimes hundreds of yards from a house or farm. But the single sherd was enough to start us looking more closely, and as we worked our way to the crest of the hill more objects were to be seen. At first there was only more of the red earthenware, enough to tell us that at one time there had been a farm nearby, but still useless for figuring out when the farm had been occupied, or by whom. The first good clue found was a sherd of what we call "refined earthenware," a white-bodied ceramic used to make plates and teacups. From the way the sherd was broken, and the faint bluish tint to the white glaze, we identified it as pearlware. Pearlware, an English imitation of Chinese porcelain, was one of the products that made Josiah Wedgwood famous. It was first produced in about 1775 and was very common until about 1830. We found another sherd of pearlware nearby, and also a piece of green wine bottle glass. When we reached the top of the long slope from the river and stood on level ground, we found many more objects.

Red brick seemed to be everywhere, in pieces as large as half a brick, and ceramics were scattered all around. We also found half of a wine bottle base, often a good indicator of date because the shapes of bottles changed so rapidly in the eighteenth century. This bottle fragment, like the other objects, appeared to date to about 1800. Although we had not yet heard of Letitia McKean or Robert Cochran, we had found their farm.

Archaeological sites are documents. Like the paper documents preserved in archives and museums, they preserve information about the past. If archaeological sites are destroyed without proper excavation, the information they have to offer is lost forever. Not so very long ago, when the country was younger and impatient to grow, few people paid attention to the loss of historical archaeological sites. There were colonial houses everywhere, so there seemed little reason to worry about preserving them. In the past 50 years, as the pace of development has quickened and the supply of historic sites has shrunk, attitudes have changed. It is now the policy of the federal government, and the state of Delaware, to preserve historic sites when possible, and to properly excavate those sites that must be destroyed. To prevent the construction of SR 1 from causing more losses of our past, the Delaware Department of Transportation (DelDOT) has conducted archaeological survey, testing, and excavation all along the route of the 50-mile highway. In the 10-mile segment from Scott Run near the Chesapeake and Delaware Canal to Pine Tree Corners, including the area around Odessa, this archaeological work has been carried out by the Cultural Resource Group of Louis Berger & Associates, Inc. (Berger).

The archaeological program on a major project like SR 1 is usually divided into three stages. The first stage is survey, which involves looking for sites, and is usually called Phase I. Any sites that are thought likely to be important are then evaluated in a second stage, known as Phase II. Sites

judged to be important records of the past are either avoided by the planned project, if that is possible, or excavated. Thorough excavation of a site is known as data recovery, or Phase III. During the survey of the 10 miles of SR 1 recently studied by Berger, 21 archaeological sites were found, 12 were evaluated at the Phase II level, and six were judged sufficiently important to merit extensive excavation (Bedell et al. 1997).

The location of the McKean/Cochran Farm was within a large prehistoric site called the Appoquinimink North Site, assigned the Delaware state site number 7NC-F-13. The evaluation, or Phase II study, of the Appoquinimink North Site was carried out in April 1995, during the warm spring that preceded a hot, dry summer. We dug more than a hundred additional shovel test pits, and 39 square test units, measuring 1 meter (just over 3 feet) on a side. We found several spearheads and other stone tools, but all were recovered from the plowzone, the soil that had been repeatedly disturbed by the plow. These artifacts were left by prehistoric hunters and gatherers as they camped along the river, probably at various times over the past 5,000 years. We found no prehistoric "features," pits dug into the soil below the plowzone. We also knew that artifacts had been collected from this site many times by amateur archaeologists and that what we found might not be typical of what had once been in the ground. We therefore decided that the prehistoric site was not worth excavating intensely.

Our finds on the historic farm site were more exciting. One of the shovel tests was excavated directly over a historic feature so deep that we never reached the bottom at this preliminary stage; we now know that this feature was the cellar of a house built around 1800 (Plate 3). We found another feature nearby, and many hundreds of artifacts from the period 1770 to 1830. After consulting with DelDOT and the Delaware State Historic Preservation Office (SHPO) (the state agency charged with overseeing archaeology in Delaware), we agreed that the site had enough to tell us about the past to merit excavation. The features and artifacts on the site could help us understand how the people of Delaware lived in the time of the American Revolution and during the early Republic—what kinds of houses they lived in, what they ate, what they wore, what kinds of dishes they used at dinner, and what kinds of decorations they had in their homes. These basic questions about how people lived in the past are fundamental to our understanding of American history and how we think about our ancestors, and, indeed, how we see ourselves.

This report describes the excavations of the McKean/Cochran Farm Site and explains what we learned from the excavations and the analysis of the finds. It is intended to be interesting to nonspecialists as well as to other archaeologists and historians. The report has been organized so that the most technical material, likely to be of use mainly to other professionals, is presented in appendices or discrete sections; other readers can skip this material if they wish. Students and other nonspecialists are especially invited to read the site history (Chapter II), the description of the archaeological features (Chapter IV), and the conclusions (Chapter VII).

The most important discoveries at the site were the foundations of several buildings, large numbers of artifacts, and large numbers of well-preserved animal and fish bones. Through the study of these discoveries we have been able to reconstruct the history of the farm, and we have learned about the



PLATE 3: Excavating Feature 1, the Later Cellar, 1800-1830



PLATE 4: Sixth-Grade Students Excavating Feature 58, a Pit, with Help from the Crew

residents' diet, clothing, and housing, about their responses to economic and social change, and about the ways they adapted their European culture to their New World environment.

This report is not the only means we have used to try to communicate the findings of our work at the McKean/Cochran Farm. While the excavations were underway, reports on our progress appeared in local and statewide newspapers. We have reported our results to local archaeological societies in New Castle and Kent counties and to the Society for Historical Archaeology. One of our most exciting efforts involved hosting classes of elementary school students, who came to the site for a day to dig with us (Plates 4 and 5). They seemed to love the digging, and we enjoyed having them.

It is common practice among North American archaeologists to excavate prehistoric sites using the metric system of measurement and historic sites using the English system. Prehistorians prefer the metric system because it makes their work comparable to work on similar sites around the world, while historians tend to use the

English system because it was used by the people whose remains they are digging up. (It is important to know if two eighteenth-century postholes are exactly 10 feet apart, but it hardly matters if they are exactly 5 meters apart.) The Appoquinimink North Site was the location of both prehistoric and historic occupations. Work at the site was therefore begun using the metric system. By the time it was known that only the historic component of the site would be excavated, the site grid had already been established using the metric system. Metric measurements were therefore used during the excavations. Because the site is historic, the artifacts found are described in English measurements. Rather than convert the measurements of the excavation units to odd English figures, the metric measurements have been retained. One meter is approximately 3.28 feet.

B. ENVIRONMENTAL SETTING

The Appoquinimink North Site and the McKean/Cochran Farm were located in southern New Castle County, Delaware. This area is within the Delaware Coastal Plain, a region of nearly flat land cut by occasional tidal creeks (Figures 1 and 2). The site was situated on a well-drained, gently sloping hill, the crest of which was approximately 100 yards from the bank of the tidal Appoquinimink River. The historic component of the site, the McKean/Cochran Farm, was located on the crest of



PLATE 5: Sixth-Grade Students Excavating Feature 55, a Pit

the hill. East of the site was a ravine that extended north from the river for a distance of about 1,000 yards. The southern end of the ravine contained tidal marshes that merged with those on the river, while the northern part held an intermittent stream. The soil on the site was Sassafras Sandy Loam, a type well suited for agriculture (Mathews and Lavoie 1970), and the current farmer, Larry Jester, told Berger personnel that the spot is extremely fertile. The site was approximately 1,500 yards southwest of Odessa and about the same distance from Middletown Road.

C. REGULATORY INFORMATION

Excavation of the McKean/Cochran Farm was undertaken by the Cultural Resource Group of Louis Berger & Associates, Inc., on behalf of the Delaware Department of Transportation. Data recovery was intended to mitigate the adverse effects

of highway construction according to the regulations established by Section 101(b)(4) of the National Environmental Policy Act; Sections 1(3) and 2(b) of Executive Order 11593; Section 106 of the National Historic Preservation Act; 36 CFR 771, as amended; the guidelines developed by the Advisory Council on Historic Preservation, published November 26, 1980; and the amended *Procedures for the Protection of Historic and Cultural Properties*, as set forth in 36 CFR 800. Artifacts were curated according to the standards of the Delaware State Museum.

D. SUMMARY OF PREVIOUS WORK

The Appoquinimink North Site was located during a Phase I Survey of the SR 1 corridor carried out by Berger in December 1994 and January 1995. The survey consisted of shovel testing at 10- and 20-meter intervals, and it revealed a large, thin scatter of prehistoric stone artifacts filling the entire area, and a domestic site dating to circa 1800 situated on the level hilltop. These findings were equated with Site 7NC-F-13, a prehistoric site previously recorded by amateur collectors. The prehistoric artifacts recovered consisted mostly of jasper and quartz flakes, but they also included a side-notched quartz projectile point and a very weathered argillite biface. The historic material

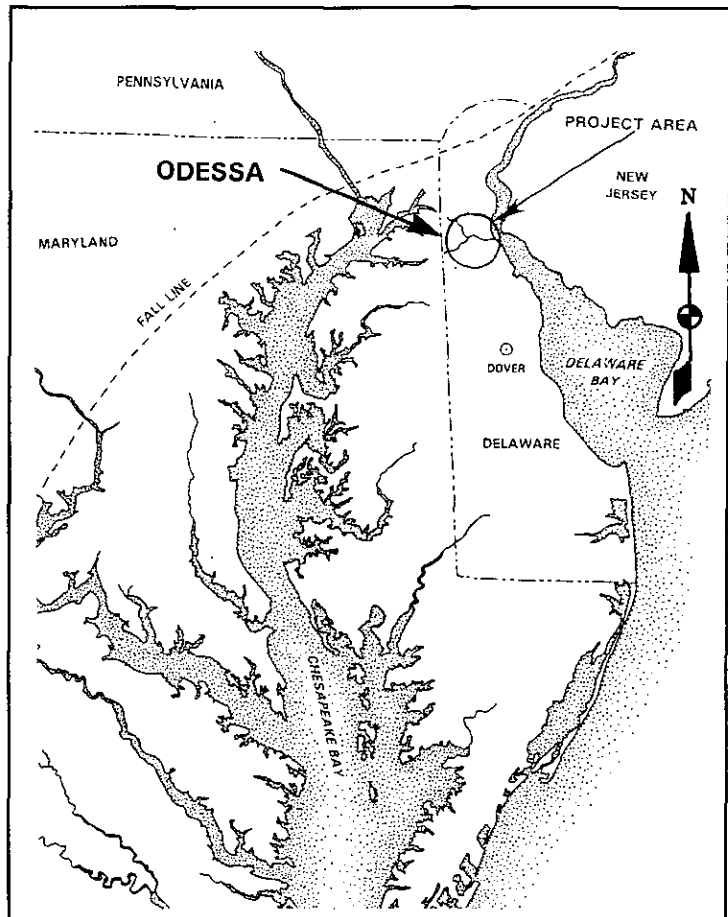


FIGURE 1: Project Area Location

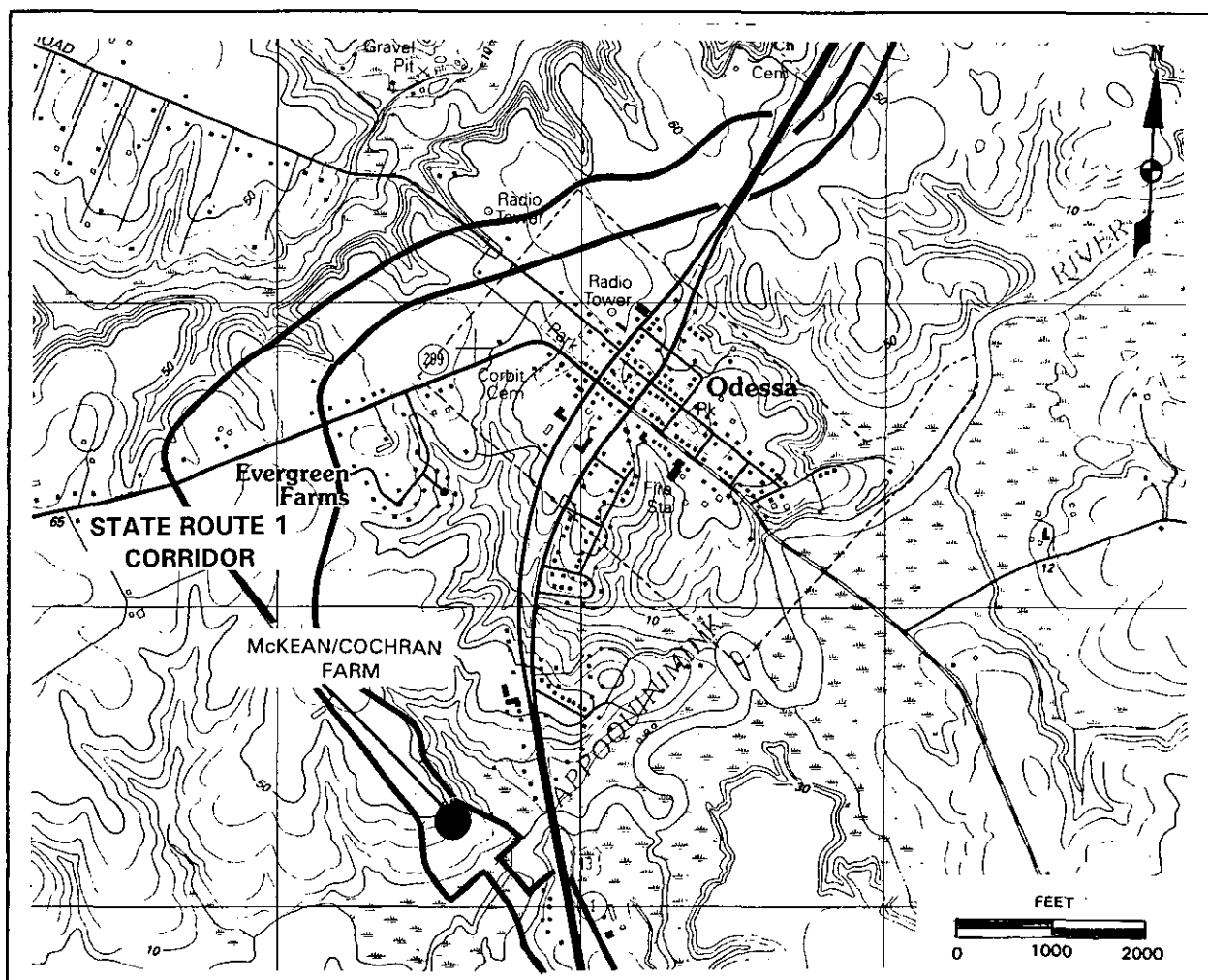


FIGURE 2: Location of the McKean/Cochran Farm Site SOURCE: USGS 7.5 Minute Series, Middletown Del. Quadrangle (photorevised 1993)

included redware, pearlware, whiteware, white clay pipestems, wine bottle glass, a circa 1800 wine bottle base, case bottle glass, and substantial quantities of brick. No artifacts datable to the late nineteenth century were recovered, and an occupation date of 1800 to 1830 was suggested for the historic component.

Phase II testing of the site, carried out in April 1995, consisted of the completion of a 10-meter-interval shovel testing grid across the site and the excavation of 39 1x1-meter test units (Figure 3). One hundred and thirteen shovel tests (STPs) were excavated during the Phase II investigation, making a total of 197 excavated on the site.

Phase II testing recovered a number of prehistoric artifacts, including stone spearpoints and knives, from all parts of the site. In most areas the artifact density was low, but an artifact concentration was found on a low rise near the river in the southeast corner of the site. Thirteen 1x1-meter test units were excavated in this area, designated the South Locus. Up to 43 artifacts, almost all stone flakes, were recovered from a single test unit. One projectile point, a broadspear resembling the Snook Kill

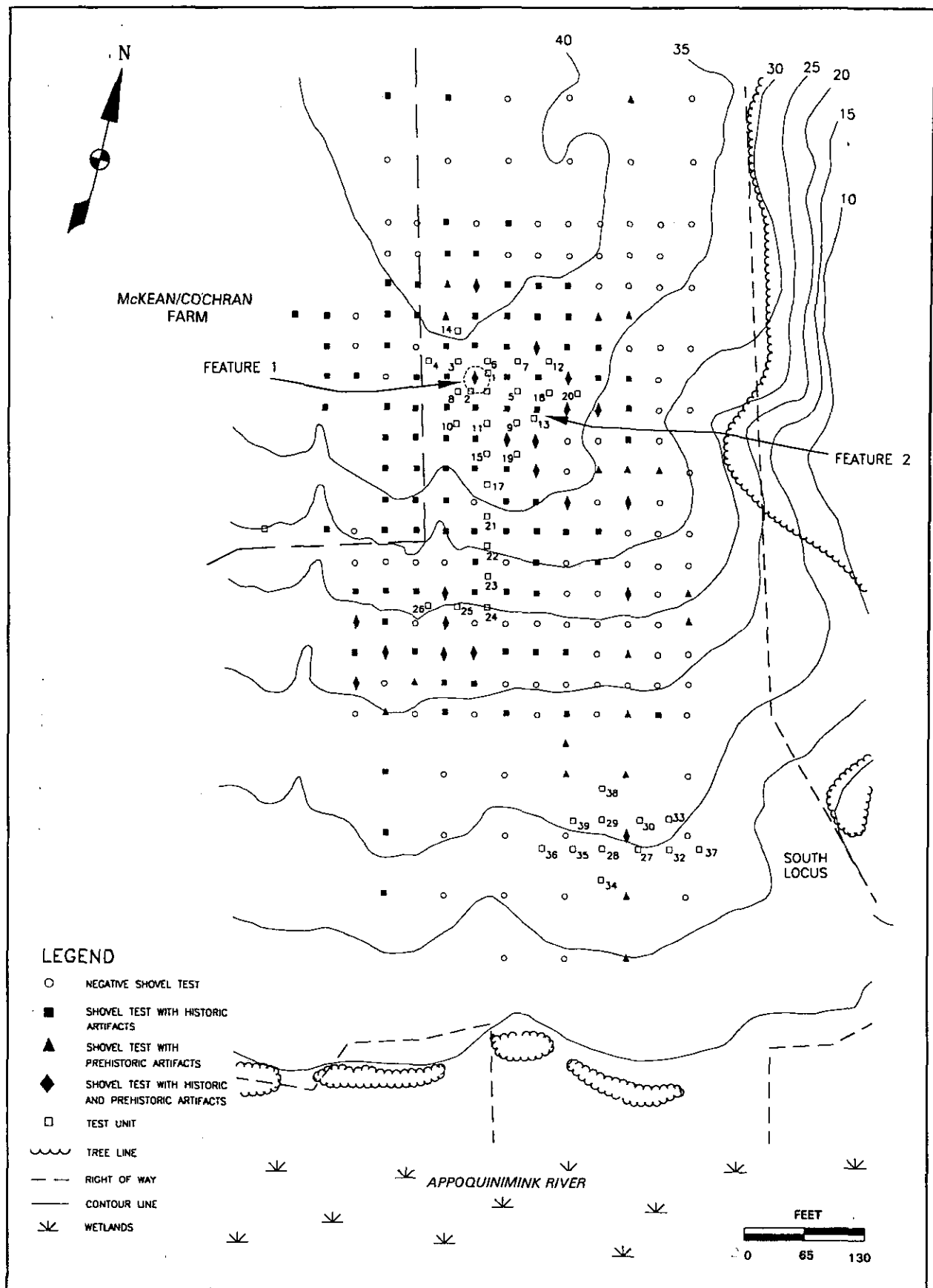


FIGURE 3: Plan of Phase I and Phase II Testing at the Appoquinimink North Site

variety, was recovered from the South Locus. Three other diagnostic spearpoints were recovered during the testing—two narrow, weak-shouldered, stemmed points resembling the Lamoka variety and a side-notched quartz Halifax point. Together, these points suggest occupation of the site in the early Woodland I (or Terminal Archaic) period, 3000 to 1000 BC. The excavated test units show that the artifact concentration in the South Locus was small, no more than 20 meters across, since densities of five or fewer artifacts per test unit were reached in all directions. Almost all the material, in the South Locus and elsewhere on the site, was recovered from the plowzone. A few individual flakes were recovered from below the plowzone, but these were attributed to disturbance.

The majority of the Phase II testing, 26 of 39 test units, was focused on the historic component. Test units excavated in the core of the historic site yielded up to 130 artifacts (excluding brick, which was not collected) from the plowzone. The artifacts were typical of a domestic site dating to the 1770 to 1830 period, and included creamware, pearlware, whiteware, white salt-glazed stoneware, Westerwald blue and gray stoneware, white clay pipestems and pipe bowl fragments, wine bottle glass, cut nails, window glass, and large quantities of redware and brick. A single coin was recovered, a battered silver piece tentatively identified as a Spanish real.

In addition, at least three historic cultural features were found on the site. Feature 1 was a large (approximately 20x20 feet), deep (at least 4 feet) pit containing a variety of fills, all of which yielded historic artifacts. The preliminary interpretation was that this feature was a backfilled well, but it proved to be the cellar of the second house built on the site. Feature 2 appeared to be some sort of construction feature, possibly a large, structural posthole. Feature 3 was a pit of undetermined function.

On the basis of these findings, Berger recommended the historic component of the site as eligible for listing in the National Register of Historic Places under Criterion D, because it had the ability to provide important information about regional history. After consulting with the Delaware SHPO, DelDOT accepted this recommendation for planning purposes. The site was situated directly on the centerline of SR 1, and could not be avoided without significant redesigning of the highway, including moving the location of a major bridge. The alignment of SR 1 had been selected after a lengthy process of consultation and public input. The locations for stream crossings had been chosen to minimize the effect on wetlands and historic resources, so changing the alignment would have been difficult. A large number of archaeological sites are located on both banks of the Appoquinimink River, and a different crossing point would almost certainly have damaged other sites. Therefore, it was decided to mitigate the effects of highway construction by extensive archaeological excavation of the site.